



FortiSwitch Release Notes

VERSION 3.6.5

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FortiSwitch 3.6.5 Release Notes

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TABLE OF CONTENTS

- Change log** 4
- Introduction** 5
 - Supported models 5
 - What’s new in 3.6.5 5
- Special notices** 6
 - Supported features for FortiSwitchOS 3.6 6
 - Connecting multiple FSW-R-112D-POE switches11
- Upgrade information**12
 - Cooperative Security Fabric upgrade 12
- Product integration and support** 13
 - FortiSwitch 3.6.5 support 13
- Resolved issues**15
- Known issues**16

Change log

Date	Change Description
February 26, 2018	Initial release
April 5, 2018	Added note 5 to the feature matrix.

Introduction

This document provides the following information for FortiSwitch 3.6.5 build: 0403.

- [Supported models on page 5](#)
- [Special notices on page 6](#)
- [Upgrade information on page 12](#)
- [Product integration and support on page 13](#)
- [Resolved issues on page 15](#)
- [Known issues on page 16](#)

See the [Fortinet Document Library](#) for FortiSwitch documentation.

Supported models

FortiSwitch 3.6.5 supports the following models:

FortiSwitch	FSW-108D-POE, FSW-124D, FSW-124D-POE, FSW-224D-FPOE, FSW-224D-POE, FSW-248D-FPOE, FSW-248D-POE, FSW-248D, FSW-424D, FSW-424D-FPOE, FSW-424D-POE, FSW-448D, FSW-448D-FPOE, FSW-448D-POE, FSW-524D-FPOE, FSW-524D, FSW-548D, FSW-548D-FPOE, FSW-1024D, FSW-1048D, FSW-3032D
FortiSwitch Rugged	FSR-112D-POE, FSR-124D

What's new in 3.6.5

FortiSwitch 3.6.5 is a patch release only. No new features or enhancements have been implemented in this release.

Special notices

Supported features for FortiSwitchOS 3.6

The following table lists the FortiSwitch features in Release 3.6 that are supported on each series of FortiSwitch models. All features are available in Release 3.6.0, unless otherwise stated.

Feature	GUI supported	108D-POE 112D-POE 224D-POE	1xxE	124D 124D-POE 200 Series 400 Series	500 Series	1024D 1048D	3032D
Link aggregation group size (maximum number of ports) (See Note 2.)	✓	8	8	8	24/48	24/48	24 (3.5.0) 64 (3.5.1)
Auto module max speed detection and notification	✓	—	—	—	✓	✓	—
IP conflict detection and notification	—	✓	✓	✓	✓	✓	✓
MAC-IP binding	✓	—	—	—	✓	✓	✓
Static BFD	—	—	—	—	—	✓	✓
Hardware-based ECMP	—	—	—	—	✓	✓	✓
Private VLANs	✓	—	—	✓	✓	✓	✓
LLDP transmit	—	✓	—	✓	✓	✓	✓
Loop guard	✓	✓	✓	✓	✓	✓	✓
LAG min-max-bundle	—	✓	✓	✓	✓	✓	✓
sFlow	✓	✓	—	✓	✓	✓	✓
Storm control	✓	✓	✓	✓	✓	✓	✓
ACL	—	—	—	✓	✓	✓	✓
Static L3/hardware-based routing	✓	—	—	✓	✓	✓	✓

Feature	GUI supported	108D-POE 112D-POE 224D-POE	1xxE	124D 124D-POE 200 Series 400 Series	500 Series	1024D 1048D	3032D
Software routing only	✓	✓	✓	—	—	—	—
CPLD software upgrade support for OS	—	—	—	—	—	✓	—
PoE-pre-standard detection (See Note 1.)	✓	✓	FS-1xxE POE	✓	✓	—	—
VLAN tag by ACL	—	—	—	✓	✓	✓	✓
ACL redirect to mirror destination as trunk/LAG	—	—	—	✓	✓	✓	✓
MAC/IP/protocol-based VLAN assignment	✓	✓	—	✓	✓	✓	✓
802.1x port mode	✓	✓	✓	✓	✓	✓	✓
802.1x MAC-based security mode	✓	✓	✓	✓	✓	✓	✓
User-based (802.1x) VLAN assignment	✓	✓	—	✓	✓	✓	✓
Virtual wire	✓	—	—	✓	✓	✓	✓
HTTP REST APIs for configuration and monitoring	—	✓	✓	✓	✓	✓	✓
Split port	—	—	—	—	✓	—	✓
IGMP snooping	—	—	—	✓	✓	✓	✓
Per-port max for learned MACs	—	—	✓	✓	✓	—	—
802.1p support, including priority queuing trunk and WRED (release 3.5.1)	—	—	—	✓	✓	✓	✓
DHCP snooping	—	—	—	✓	✓	✓	✓
LLDP-MED	—	✓	✓	✓	✓	✓	✓

Feature	GUI supported	108D-POE 112D-POE 224D-POE	1xxE	124D 124D-POE 200 Series 400 Series	500 Series	1024D 1048D	3032D
DHCP relay feature	—	—	✓	✓	✓	✓	✓
Support for switch SNMP OID	—	✓	✓	✓	✓	✓	✓
Access VLANs (See Note 5.)	—	—	—	✓	✓	✓	✓
802.1x enhancements, including MAB (release 3.5.1)	✓	✓	✓	✓	✓	✓	✓
Multi-stage load balancing (release 3.5.1)	—	—	—	—	—	✓	✓
MCLAG (multichassis link aggregation)(release 3.6.0)	—	—	—	✓ (not on 124D/124D-POE)	✓	✓	✓
Dynamic layer-3 protocols (OSPF, RIP, and VRRP) (release 3.6.0) (See Note 3.)	✓	—	—	✓ (not on 124D/124D-POE)	✓	✓	✓
Dynamic ARP inspection (release 3.6.0)	—	—	—	✓	✓	✓	✓
Firmware image rotation (dual-firmware image support) (release 3.6.0)	—	✓ (not on 108D-POE)	—	✓	✓	✓	✓
TDR (time-domain reflectometer)/cable diagnostics support (release 3.6.0)	✓	—	—	✓	✓	✓	✓
MAC learning limit (release 3.6.0) (See Note 4.)	—	—	✓	✓	✓	—	—
Sticky MAC on switch interfaces (release 3.6.0)	—	—	—	✓	✓	✓	✓

Feature	GUI supported	108D-POE 112D-POE 224D-POE	1xxE	124D 124D-POE 200 Series 400 Series	500 Series	1024D 1048D	3032D
PoE modes support: first come, first served or priority based (PoE models) (release 3.6.0)	—	✓	FS-1xxE POE	✓	✓	—	✓
ACL: egress mask action support (release 3.6.0)	—	—	—	✓	✓	✓	✓
Monitor system temperature (threshold configuration and SNMP trap support) (release 3.6.0)	—	✓	—	✓	✓	✓	✓
'forced-untagged' or 'force-tagged' setting on switch interfaces (release 3.6.0)	—	✓	—	✓	✓	✓	✓
Selective packet sampling to CPU (useful diagnostic tool) (release 3.6.0)	—	—	—	✓	✓	✓	3.6.1
Add CLI to show the details of port statistics (release 3.6.0)	—	✓	✓	✓	✓	✓	✓
Display progress (%) during firmware upgrade (release 3.6.0)	✓	✓	✓	✓	✓	✓	✓
STP root guard (release 3.6.2)	—	✓	✓	✓	✓	✓	✓
STP BPDU guard (release 3.6.2)	—	✓	✓	✓	✓	✓	✓
IGMP snooping: static multicast groups (release 3.6.2)	—	—	—	✓	✓	✓	✓
DHCP snooping: entry limit per port (release 3.6.2)	—	—	—	✓	✓	✓	✓

Feature	GUI supported	108D-POE 112D-POE 224D-POE	1xxE	124D 124D-POE 200 Series 400 Series	500 Series	1024D 1048D	3032D
Network device detection (release 3.6.2)	—	—	—	✓	✓	✓	✓
QoS queue counters (releases 3.6.2 and 3.6.3)	—	—	—	✓	✓	✓	✓
Support of the RADIUS accounting server (release 3.6.3)	—	✓	—	✓	✓	✓	✓
Support of RADIUS CoA and disconnect messages (release 3.6.3)	—	✓	—	✓	✓	✓	✓
802.1x authentication: EAP-TLS support (release 3.6.3)	—	✓	—	✓	✓	✓	✓
DHCP snooping: CLI for DHCP-snooping server database (release 3.6.3)	—	—	—	✓	✓	✓	✓
Unicast hashing (release 3.6.4)	—	—	—	✓	✓	✓	✓
STP supported in MCLAGs (release 3.6.4)	—	—	—	✓ (not on 124D/124D-POE)	✓	✓	✓
QoS marking (release 3.6.4)	—	—	—	✓	✓	✓	✓
MAB reauthentication disabled (release 3.6.4)	—	✓	—	✓	✓	✓	✓
Cut-through switching (release 3.6.4)	—	—	—	—	—	✓	✓
Control of temperature and PoE alerts (release 3.6.4)	—	✓	—	✓	✓	✓	✓
IGMP querier (release 3.6.4)	—	—	—	✓	✓	✓	✓

Feature	GUI supported	108D-POE 112D-POE 224D-POE	1xxE	124D 124D-POE 200 Series 400 Series	500 Series	1024D 1048D	3032D
Configuration of the QSFP low-power mode (release 3.6.4)	—	—	—	—	✓	1048D	✓
Learning limit violation log (release 3.6.4) (See Note 4.)	—	—	—	✓	✓	—	—
Sticky MAC addresses saved to static MAC table (release 3.6.4)	—	—	—	✓	✓	✓	✓
Enabling packet forwarding to CPU (release 3.6.4)	—	—	—	✓	—	—	—

Notes

1. PoE features are applicable only to the model numbers with a POE or FPOE suffix.
2. 24-port LAG is applicable to 524D, 524_FPOE, 1024D, and 3032D models. 48-port LAG is applicable to 548D, 548_FPOE, and 1048D models.
3. To use the dynamic layer-3 protocols, you must have an advanced features license.
4. The per-VLAN learning limit and per-trunk learning limit are not supported on dual-chip platforms (248 and 448 series).
5. Access VLANs are not supported on 108D-POE, 224D-POE, or 112D-POE.

Connecting multiple FSW-R-112D-POE switches

The FSW-R-112D-POE switch does not support interconnectivity to other FSW-R-112D-POE switches using the PoE ports. Fortinet recommends using the SFP ports to interconnect switches.

Upgrade information

FortiSwitch 3.6.5 supports upgrading from FortiSwitch 3.5.0 and later.

Cooperative Security Fabric upgrade

FortiOS 5.4.1 greatly increases the interoperability between other Fortinet products. This includes:

- FortiClient 5.4.1
- FortiClient EMS 1.0.1
- FortiAP 5.4.1
- FortiSwitch 3.4.2

The upgrade of the firmware for each product must be completed in a precise order so the network connectivity is maintained without the need of manual steps. Customers must read the following two documents prior to upgrading any product in their network:

- *Cooperative Security Framework - Upgrade Guide*
- *FortiOS 5.4.0 to 5.4.1 Upgrade Guide for Managed FortiSwitch Devices*

This document is available in the Customer Support Firmware Images download directory for FortiSwitch 3.4.2.

Product integration and support

FortiSwitch 3.6.5 support

The following table lists 3.6.5 product integration and support information.

Web browser	<ul style="list-style-type: none">• Microsoft Internet Explorer version 11• Mozilla Firefox version 52• Google Chrome version 56 <p>Other web browsers may function correctly, but are not supported by Fortinet.</p>
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**FortiOS
(FortiLink Support)**

- 5.4.1 and later
FortiSwitch must be upgraded first before upgrading FortiOS. Please read the *Upgrade Information > Cooperative Security Fabric Upgrade* section in this document.
- 5.4.0
FortiSwitch models: FSW-108D-POE, FSW-124D, FSW-124D-POE, FSW-224D-POE, FSW-224D-FPOE, FSW-248D-POE, FSW-248D-FPOE, FSW-424D, FSW-424D-POE, FSW-424D-FPOE, FSW-448D, FSW-448D-POE, FSW-448D-FPOE, FSW-524D, FSW-524D-FPOE, FSW-548D, FSW-548D-FPOE, FSW-1024D, FSW-1048D, FSW-3032D, FSR-112D-POE

FortiGate models: FG-60D, FG-60D-POE, FG-90D, FG-90-POE, FG-100D, FG-140D, FG-140D-POE, FG-140D-POE-T1, FG-200D, FG-240D, FG-280D, FG-280D-POE, FG-600C, FG-800C, FG-1000C, FG-1500D, FG-1200D, FG-3700D, FG-3700DX

FortiWiFi models: FWF-60D, FWF-60D-POE, FWF-90D, FWF-90D-POE
- 5.2.3 and later
FortiSwitch models: FSW-108D-POE, FSW-124D, FSW-124D-POE, FSW-224D-POE, FSW-224D-FPOE, FSR-112D-POE

FortiGate models: FG-60D, FG-90D, FG-100D, FG-140D, FG-200D, FG-240D, FG-280D, FG-600C, FG-800C, FG-1000C, FG-60D-POE, FG-90D-POE, FG-140D-POE, FG-140D-POE-T1, FG-280D-POE

FortiWiFi models: FWF-60D, FWF-60D-POE, FWF-90D, FWF-90D-POE
- 5.2.2
FortiSwitch models: FSW-224D-POE

FortiGate models: FG-90D, FG-90D-POE, FG-100D, FG-140D, FG-140D-POE, FG-140D-POE-T1, FG-200D, FG-240D, FG-280D, FG-280D-POE, FG-600C, FG-800C, FG-1000C

FortiWiFi models: FWF-90D, FWF-90D-POE

Resolved issues

The following issues have been fixed in 3.6.5. For inquiries about a particular bug, please contact [Customer Service & Support](#).

Bug ID	Description
0468452	A FortiSwitch interface does not respond to SNMP queries.
0467494	MAC learning on a multichassis LAG (MCLAG) inter-chassis link (ICL) trunk slows down when there are more than 7,000 hosts.
0470278	A FortiSwitch unit with an MCLAG ICL trunk configured issues a warning about one or more trunk members having access control lists (ACLs) configured.
0465207	A 424D FortiSwitch unit in FortiLink mode could not be changed back to standalone mode.
0472778	MAC authentication bypass (MAB) does not work on some FortiSwitch models.
0466223	The FortiSwitch unit reports that the temperature sensor has exceeded the warning threshold.
0463404	After the FortiSwitch unit has been restarted, the system does not synchronize immediately with a Network Time Protocol (NTP) server.
0470933	When a FortiGate unit is managing multiple FortiSwitch units and the FortiSwitch units have MCLAG and Spanning Tree Protocol (STP) configured, the FortiGate unit loses connectivity with the directly attached FortiSwitch units.
0299505, 0458050, 0458189, 0467770	STP has performance issues.

Known issues

The following known issues have been identified with 3.6.5. For inquiries about a particular bug or to report a bug, please contact [Fortinet Customer Service & Support](#).

Bug ID	Description
391607	Switch does not send gratuitous ARP for IP conflict when the system boots up and adds a new switch virtual interface (SVI).
414972	IGMP snooping might not work correctly when used with 802.1x Dynamic VLAN functionality.
416655	IGMP snooping might not work correctly when used with 802.1x Dynamic VLAN functionality.
417024, 438441	DHCP client lease time on PVLAN is inaccurate.
417073, 438441	DHCP MAC address client is learned on Primary VLAN instead of the isolated VLAN.
417099, 438441	The system shows no DAI stats entry on PVLAN ports.
423940	In some cases, the MAC address and VLAN ID are shown (diagnostic command) twice on the same interface after splitting ports.
380239	IGMP-snooped multicast groups are not immediately flushed out of the snooping table when the querier port is shut down.
460999	<p>When you enable Energy Efficiency Ethernet (EEE) on an Apple Thunderbolt to Gigabit Ethernet Adapter, the FortiSwitch port might flap continuously.</p> <p>Workaround: If you are using MacBook with the Apple Thunderbolt to Gigabit Ethernet Adapter, disable EEE on the Apple Thunderbolt to Gigabit Ethernet Adapter when connecting to the FortiSwitch.</p>



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